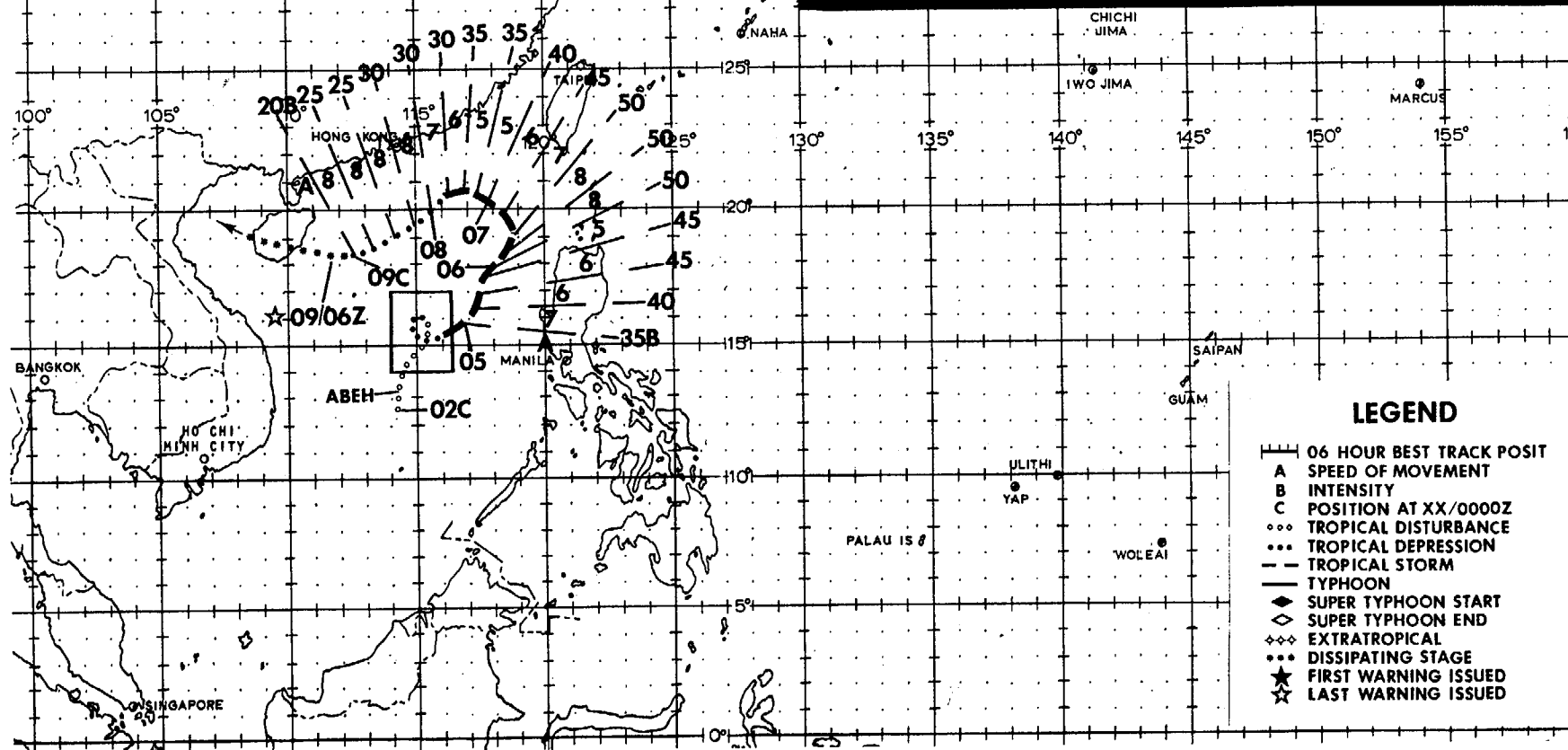
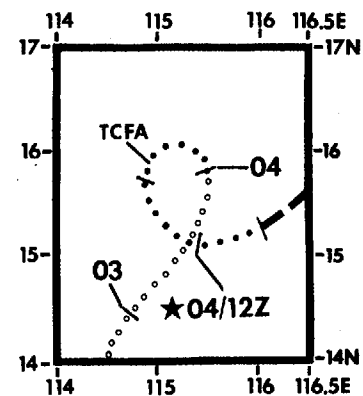


**TROPICAL
STORM ROY**
BEST TRACK TC-13
04 AUG-09 AUG 1981
MAX SFC WIND 50 KTS
MINIMUM SLP 986 MBS

DTG	SPEED	INTENSITY
0300Z		25
0400Z	8	25
0406Z	8	25
0412Z	8	30



LEGEND

- 06 HOUR BEST TRACK POSIT
- A SPEED OF MOVEMENT
- B INTENSITY
- C POSITION AT XX/0000Z
- ... TROPICAL DISTURBANCE
- ... TROPICAL DEPRESSION
- TROPICAL STORM
- TYPHOON
- ◆ SUPER TYPHOON START
- ◇ SUPER TYPHOON END
- ◆◆ EXTRATROPICAL
- ... DISSIPATING STAGE
- ★ FIRST WARNING ISSUED
- ☆ LAST WARNING ISSUED

TROPICAL STORM ROY (13)

Tropical Storm Roy was spawned in the warm water east of Vietnam during the first few days of August. On 2 August, a low-level circulation center became evident from synoptic reports in the region. For the next two days, the disturbance tracked slowly northward and on 4 August, it acquired a noticeable central convective feature. At 040515Z, a tropical cyclone formation alert was issued and in the 13 hours which followed, the disturbance was upgraded to Tropical Depression 13 (041200Z) and Tropical Storm Roy (041800Z). Figure 3-13-01 shows the disturbance on infrared satellite imagery at the time the decision to upgrade to warning status was made.

For the next 36 hours, Roy slowly intensified and reached a peak intensity of 50 kt (26 m/sec) on 6 August. During this period of intensification, the upper level features associated with Roy began to move west of the surface center, under the influence of a moderate mid- and upper-tropospheric shearing current. Figure 3-13-02 shows Roy's low-level center

emerging from the main convective feature. From 6 August to Roy's eventual dissipation on 9 August, the system existed as an exposed low-level center with most of the convection displaced well west of the low-level center.

Roy's track through the South China Sea was difficult to fully anticipate. From the beginning, Roy was expected to track slowly towards the north-northeast then turn to a more northwesterly heading. However, in the initial stages, Roy moved steadily northeastward. Roy's movement appeared to be related to the combined effects of the low-level monsoon flow east of Roy's center and the general alignment with a mid-tropospheric trough which extended southwest from Tropical Storm Phyllis. On 6 August, however, the mid-tropospheric trough closed-off northeast of Roy and the system gradually turned towards the west in response to the reestablishment of the Asian high pressure ridge over southern China. Eventually, Roy weakened as a significant tropical cyclone in the northwestern South China Sea prior to crossing Hai-nan.

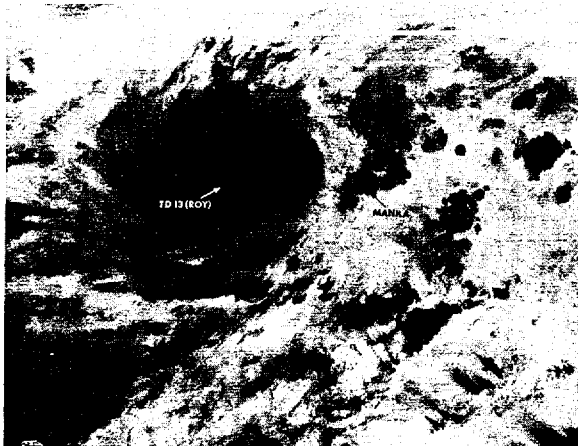


FIGURE 03-13-1. NOAA 6 IR 041124Z AUG 81
The central convective features over the developing Tropical Storm Roy. Based on this imagery (041124Z Aug 81) and some synoptic ship reports in the vicinity, the decision to issue tropical cyclone warnings was made. (NOAA 6 infrared imagery)

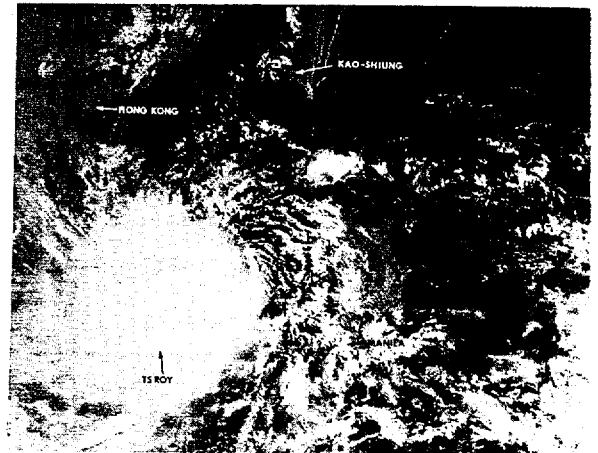


FIGURE 03-13-2. NOAA 6 VIS 052340Z AUG 81
Visual satellite imagery for the first time shows Roy as a partially exposed low-level circulation center. (052340Z Aug 81) During the 24 hours which followed, Roy would become fully exposed and would begin a gradual weakening trend. (NOAA 6 visual imagery)